

## CLAIMS

1. A polynucleotide encoding mammalian Prickle protein, wherein the polynucleotide comprises a sequence selected from the following nucleic acid sequences of (1) to (4):
  - 5 (1) a nucleic acid sequence that encodes the amino acid sequence of SEQ ID NO: 1, or a complementary sequence thereof;
  - (2) the nucleic acid sequence of SEQ ID NO: 2, or a complementary sequence thereof;
  - (3) a nucleic acid sequence that encodes an amino acid sequence with one or more amino acid deletions, insertions, substitutions, or additions to the amino acid sequence of SEQ ID NO: 1, or a sequence complementary to said nucleic acid sequence; and
  - (4) a nucleic acid sequence that hybridizes with the sequence of (2) under stringent conditions.
- 15 2. A vector comprising the polynucleotide of claim 1.
3. A host cell comprising the polynucleotide of claim 1 or the vector of claim 2.
4. A method for producing a mammalian Prickle protein encoded by the polynucleotide of claim 1, wherein the method comprises the step of translating said polynucleotide.
5. A fragment of a polypeptide encoded by the polynucleotide of claim 1, wherein the fragment comprises at least eight amino acid residues.
- 20 6. An antibody directed against a polypeptide encoded by the polynucleotide of claim 1, or the polypeptide fragment of claim 5.
7. A nucleotide chain that encodes the polypeptide fragment of claim 5.